



Enhancing Plant Science Education in the Bronx: Training the Next Generation of Botanist to Protect US Natural Resources

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PROJECT DESCRIPTION

This project serves to strengthen the educational and professional advancement of traditionally under-represented students by enhancing curriculum and training relevant to the USDA's work in food, agriculture and protection and enhancement of the Nation's natural resource base and environment. Through a partnership with two Bronx-based HSIs (Lehman College and Hostos Community College), a botanical research institution The New York Botanical Garden (NYBG) and the United States Department of Agriculture, Animal and Plant Health Inspection Station (USDA, APHIS), the project will provide students with a unique and important educational opportunity that combines a new course, an internship program, the tools of geographic information systems (GIS) and the opportunity to learn about and become directly engaged in the work of the USDA. This will be accomplished through a program of curriculum development, instructional delivery systems, equipment acquisition, and student experiential learning, as outlined below.

Thus, this project is in support of two important USDA strategic goals: 1), the enhancement of the protection and safety of the Nation's agriculture and food supply and 2) the protection and enhancement of the Nation's natural resource base and environment. We also seek to provide training and experience that could lead towards a career path for Hispanic students

EXPECTED IMPACT

We anticipate that this program will help undergraduate students at two important HSIs, Hostos Community College and Lehman College, to receive enhanced training and experience in applied plant sciences, allowing them to expand their career opportunities in agricultural and food science.

OBJECTIVES

The overall objective of this project is to improve plant science education in the Bronx, through a partnership of two CUNY institutions (Lehman and Hostos), the NYBG, and the USDA, APHIS. To achieve this, we have developed the following three goals:

1.Enhance curriculum at Lehman in Biological Sciences and Environmental, Geographic and Geological Sciences (EGGS) through new courses, expansion of lessons in plant sciences, and utilizing resources and expertise at the NYBG and the USDA, APHIS at JFKIA.

2.Improve the geographic information system (GIS) computer facility at Lehman and the NYBG through the purchase of equipment and software. Both facilities will be available for students, scientists and project collaborators.

3.Create internships at the NYBG, Lehman, and USDA, APHIS for Lehman and Hostos students using the combined expertise of scientists at all participating institutions..

ACTIVITIES

Training will involve new courses, facilities, collaborations and an internship at our partner USDA agency, the USDA, APHIS, Plant Inspection Station (PIS) at John F. Kennedy International Airport (JFKIA), as well as at the NYBG and Lehman College. Students will have internship opportunities at that facility and receive hands on training in procedures to ensure the protection and safety of the nation's agriculture and food supply.

